

REMARKS

This amendment is made in response to the Final Office Action mailed February 21, 2001, with the term for reply extended three months. Reconsideration and withdrawal of the objections and rejections of this application are respectfully requested in view of the amendments and remarks herewith.

Claims 16 to 34 are now pending. Claims 1 to 15 are cancelled without prejudice, admission, surrender or with any intention to create any estoppel as to equivalents. Although Applicants disagree with the assertions made in the Office Action concerning claims 1 to 15, in the interest of expediting the prosecution of this application, claims 1 to 15 have been cancelled and Applicants reserve the right to pursue canceled subject matter in a continuation application.

It is submitted that these claims are patentably distinct from the references cited in the Office Action, and that these claims are in full compliance with the requirements of 35 U.S.C. §112. The amendments to the claims and specification and remarks made herein are not made for the purpose of patentability within the meaning of 35 U.S.C. §§ 101, 102, 103 or 112; but rather the amendments to the claims and specification and remarks are made simply for clarification and to round out the scope of protection to which Applicants are entitled.

Support for new claims 16-34 can be found in the originally filed specification and in the cancelled claims. Specifically, support for new claims 16-28 can found in cancelled claims 1 to 12 and 15; support for claims 29-32 can be found on page 5, lines 8-20; and support for new claims 33 and 34 can be found in cancelled claims 13 and 14, respectively, and from new claim 16.

No new matter is added.

Claims 16-34 are pending.

The Examiner is thanked for withdrawing various objections and rejections of the present application. (Office Action, at 2 to 3).

The disclosure is objected to for allegedly introducing new matter by amendment (Office Action, at 3 to 5). Specifically, the December 12, 2000 Amendment included the phrase “cyano groups” as a polar functional group and “ester, amide, sulfide, ether” as one of the methods for introducing crosslinked structure which the Examiner believes constitutes new matter.

In order to advance prosecution, the phrase “polar functional group such as cyano group” has been deleted, without prejudice, from the specification. Support for the recitation “ester, amide, sulfide, ether” can be found in original claim 7.

The disclosure stands objected as to the term “electrolytic solution.” Applicants respectfully disagree. A skilled artisan would readily understand the meaning of “electrolytic solution.”

The Office Action objects to the improper use of the trademarks in the specification. The Examiner is thanked for her helpful suggestion. Accordingly, appropriate corrections are made to the trademarks.

The Final Office Action continued its objection to the disclosure by asserting that it is not clear as to how examples provided in the present specification are made by both methods 1 and 3, or by methods 4 and 5 since method 1 is not the same as method 3, nor is method 4 the same as method 5. Applicants respectfully disagree with this assertion and again respectfully invite the Examiner’s attention to review page 25, lines 1 to 5 of the originally filed specification, which states:

In Examples 1 to 8 and 20 to 30 and Comparative Examples 1, 2, 5 and 6, two methods for toner preparation are employed. However,

the toner formulation and the resin structure are common, so that the results on the evaluation items are the same.

In view of the foregoing, withdrawal and reconsideration of the objection to the examples in the specification are respectfully requested.

The specification is also objected to for allegedly failing to provide proper antecedent basis for claims 13 and 14 (Office Action, at 8 to 10). The specification has been amended, without prejudice, to provide proper antecedent basis and the objection is, therefore, moot.

Reconsideration and withdrawal of the objections to this application are respectfully requested.

Claims 2, 4, 7 and 13-15 stand rejected under 35 U.S.C., §112, second paragraph, as being allegedly indefinite (Office Action, at 10 to 14). The rejection is traversed.

The cancellation of claims 1-15, without admission or prejudice, and the addition of new claims 16-34 have rendered the rejection moot. Further, Applicants disagree with the assertion on page 13 of the Office Action that “it is not clear how the polyolefin’s crosslinked structure is obtained by the formation of a terpolymeric polyolefin.” A skilled artisan would readily understand that a terpolymer is formed by the reaction of three monomers: a diene, the acyclic olefin and the cycloolefin (*see* specification at page 13, lines 3-15). Further, the functioning of the resin is achieved by “known chemical reactions, such as oxidation or epoxidation, or the addition of a crosslinking agent to form a crosslinked structure[.]” (*Id.*). Thus, a skilled artisan would know what system is being reacted and would know how the crosslinked structure is obtained, thereby obviating the allegations of indefiniteness in the Office Action.

Consequently, reconsideration and withdrawal of the rejection are respectfully requested.

Claims 7 and 15 stand rejected under 35 U.S.C., §112, first paragraph, for allegedly lacking written description (Office Action, at 15-20). The rejection is traversed.

The function of the written description requirement is to ensure that the inventor had possession, as of the filing date of the application relied on, of the specific subject matter claimed by him, and to ensure that sufficient information is disclosed so as to enable the public to practice the claimed subject matter; how the specification accomplishes this is not material. In re Smith, 178 U.S.P.Q. 620 (C.C.P.A. 1973). The test for written description under 35 U.S.C. § 112, first paragraph, is whether the specification disclosure reasonably conveys to a person having ordinary skill possession of the subject matter claimed. In re Kaslow, 217 U.S.P.Q. 1089 (Fed. Cir. 1983).

It is not necessary that the specification exactly describe the limitations, but only so clearly that those skilled in the art would recognize from the disclosure the claimed process, including those limitations. In re Wertheim, 191 U.S.P.Q. 90 (C.C.P.A. 1976).

The specification as filed reasonably conveys the presently claimed invention to a person having ordinary skill in the art

In addition, Applicants respectfully remind the Examiner, that the test is not whether the application describes the claimed invention exactly, but only so clearly that persons of ordinary skill in the art will be enabled from the disclosure to make and use the claimed subject matter. In re Wertheim, 191 U.S.P.Q. 90 (C.C.P.A. 1976); In re Eichmeyer, 202 U.S.P.Q. 655 (C.C.P.A. 1979). And, as already stated, **the definiteness requirement of § 112 cannot be used to require more precision than the relevant technology permits or is capable of generating.** Orthokinetics, Inc. v. Safety Travel Charis, Inc., 1 U.S.P.Q.2d 1081 (Fed Cir. 1986); Hybritech, Inc. v. Monoclonal Antibodies, Inc., 231 U.S.P.Q. 81 (Fed. Cir. 1986), cert. denied, 480 U.S. 947 (1987).

Applicants assert that the cancellation of claims 1-15, without admission or prejudice, and the addition of new claims 16-34 have rendered the rejection moot. Further, Applicants disagree with the allegation that the specification does not adequately describe a terpolymeric polyolefin or a crosslinked structure in the polyolefin having a cyclic structure obtained by the reaction of a diene monomer with ester, amide, sulfide, or ether and a cycloolefin monomer. (Office Action, at 15-16). The Office Action is implying that the application requires an exactitude and precision far beyond what the Federal Circuit deems necessary to satisfy a Section 112 inquiry. As explained above, the test for written description is whether the invention is described clearly enough so that persons of ordinary skill in the art would be able from the disclosure to make and use the claimed subject matter. It is clear that the test is satisfied in the instant case because a skilled artisan, reading page 13 of the specification, would readily understand that one of the methods for introducing a crosslinked structure into the polyolefin resin having a cyclic structure is to add, *inter alia*, a diene (such as norbornadiene or cyclohexadiene) with the acyclic olefin and the cycloolefin, followed by reacting the system, to obtain a terpolymeric polyolefin having a cyclic structure. Both a terpolymeric structure and the crosslinked structure noted above are known in to those with skill in the art. Applicants have met their burden as required by the courts and, thus, do not believe that any additional disclosure is warranted to satisfy Section 112.

Consequently, reconsideration and withdrawal of the rejection are respectfully requested.

Claims 1 to 9, 12 and 15 are rejected under 35 U.S.C. §102(a) as said to be anticipated by WO97/05529 (“WO ‘529”) (Office Action, at 20-22). Claim 14 is rejected under 35 U.S.C. §103(a) as said to be unpatentable over WO ‘529 (Office Action, at 22-23). Claims 10 and 11 are rejected under U.S.C. §103(a) as said to be unpatentable over WO ‘529 combined with U.S.

Patent No. 5,707,772 to Akimoto et al. ("Akimoto") (Office Action, at 23-30). Claim 14 is rejected under 35 U.S.C. §103(a) as said to be unpatentable over U.S. Patent No. 4,923,778 to Blair et al. ("Blair"), as further evidenced by U.S. Patent No. 5,019,477 to Felder ("Felder") (Office Action, at 30-33). Claim 13 is rejected under 35 U.S.C. §103(a) as said to be unpatentable over U.S. Patent No. 5,843,613 to Fujiwara et al. ("Fujiwara"), as further evidenced by ACS file Registry No. RN 64365-06-6 ("ACS"), combined with Felder and U.S. Patent No. 4,659,640 to Santilli ("Santilli") (Office Action, at 33-39). These rejections will be addressed collectively.

A verified translation of JP 8-348546 will be submitted shortly in order to claim the benefit of the December 26, 1996 filing date which would predate WO '529's publication date.

The present invention claims and discloses a toner for development of an electrostatically charged image. More specifically, the invention teaches, *inter alia*, a dry one-component magnetic toner, a dry one-compartment nonmagnetic toner, a dry two-compartment toner and a dry polymerized toner and can form a well-fixed, highly transparent, sharp image. The toner in accordance with the present invention can be used in copiers, printers, facsimile machine, color copiers, color laser printers, and electrophotographic high speed printers. Specifically, the toner in accordance with the present invention is for developing an electrostatically charged image wherein the binder resin is a polyolefin resin having a cyclic structure and comprises at least two portions of the resin of lower (<7,500) or higher (>7,500) molecular weight. The binder may either be a mixture of different molecular weight cyclic polyolefin resins or a cyclic polyolefin resin with molecular weight distribution possessing at least two peaks. More specifically, the present invention relates to, *inter alia*, a toner for developing an electrostatically charged image, the toner comprising (a) a binder resin comprised of at least one polyolefin resin having a cyclic

structure, wherein the polyolefin resin having a cyclic structure comprises (i) a first resin or a first resin fraction with a number average molecular weight ( $M_n$ ), as measured by GPC, of less than 7,500; and (ii) a second resin or a second resin fraction with a number average molecular weight ( $M_n$ ) of 7,500 or more and a glass transition temperature  $T_g$  of lower than 70°C; (b) a colorant; (c) a function imparting agent; and (d) a charge control agent, wherein if the second resin or second resin fraction has an intrinsic viscosity (i.v.) of 0.25 dl/g or more, and a number average molecular weight ( $M_n$ ) of 7,500 or more and a weight average molecular weight ( $M_w$ ) of 15,000 or more, as measured by the GPC method, then the second resin or second resin fraction is contained in a proportion of less than 50% by weight based on the entire binder resin.

None of the cited references, disclose or suggest, a toner for developing an electrostatically charged image, the toner comprising, *inter alia*:

a binder resin comprised of at least one polyolefin resin having a cyclic structure,

wherein the polyolefin resin having a cyclic structure comprises:

- (i) a first resin or a first resin fraction with a number average molecular weight ( $M_n$ ), as measured by GPC, of less than 7,500; and
- (ii) a second resin or a second resin fraction with a number average molecular weight ( $M_n$ ) of 7,500 or more and a glass transition temperature  $T_g$  of lower than 70°C.

WO '529 relates to a hot-roller fixing toner for developing electrostatically charged images which mainly comprises a binder resin, a colorant and a charge control agent, characterized in that the binder resin at least comprises a polyolefin resin having a cyclic structure and contains less than 50 wt. % of a polyolefin resin having a cyclic structure, satisfying the relationships: I.V. (intrinsic viscosity)  $\geq$  0.25 dl/g and HDT (heat deformation

temperature according to DIN 53461-B)  $\leq 70^{\circ}\text{C}$  and exhibiting a number average molecular weight of 7,500 or above and a weight-average molecular weight of 15,000 or above as determined by GPC. This toner is useful in fixation, light transmittance and inhibition of spent toner generation and can give clear and high-quality images. Further, the toner can be applicable to dry single component type magnetic toners, dry single-component type nonmagnetic toners, dry two-component type toners and liquid toners. This toner can also be used as color toners. However, WO '529 provides a narrow offset-free temperature range suitable for practical use and unable to achieve full fixing at a higher copying speed.

Applicants again respectfully point out that WO '529 is not a proper anticipatory reference and disagree with the assertion in the Office Action that there is no evidence that the toners disclosed in WO '529 are not the work of others, but of the instant inventors. (Office Action, at 29). It is respectfully asserted that if the work in WO '529 was, indeed, done by others, then these "others" would be listed as inventors on WO '529. There are no "others" here. The only inventors listed on the face of WO '529 are Nakamura, Nishioka, Hoga and Fukuzawa, i.e., co-inventors of the instant application. Applicants respectfully ask that the rejections based on WO '529 be reconsidered and withdrawn.

Contrary to the allegations in the Office Action, Applicants respectfully point out that WO '529 does not disclose or suggest a high molecular weight resin possessing a glass transition temperature below  $70^{\circ}\text{C}$ . The Office Action's reliance on T745 as evidence of anticipation is misguided. T745 is a low molecular weight resin and does not meet the limitation of high molecular weight species having a glass transition temperature below  $70^{\circ}\text{C}$ .

Thus, WO '529 is limiting in its application of polyolefin resins having a cyclic structure and a high molecular weight, which are characterized by a HDT of  $70^{\circ}\text{C}$  or higher. In the



examples of WO '529, only one **high** molecular weight species of such resin is disclosed possessing a glass transition temperature ( $T_g$ ) of 80°C. Besides such high molecular weight components, polyolefin resins having a cyclic structure and a lower molecular weight can be used in the binder formulations of the earlier patent application.

Contrary to WO '529, in the present invention, high molecular weight components of polyolefin resins having a cyclic structure and possessing a glass transition temperature  $T_g$  of lower than 70°C can be used. A basis for this assertion can be found on page 7, line 12 of the present specification. Furthermore, the Examiner's attention is respectfully requested to review the examples in the present specification, wherein such resins are disclosed (*See* Samples Nos. 2 and 9 in Table 2). WO '529 does not disclose nor suggest such a toner.

Akimoto relates to a toner having at least one resin, a colorant and a releasing agent, wherein a low molecular weight polyolefin polymer synthesized by using a metallocene catalyst is employed as aforesaid releasing agent. Specifically, the polyolefin polymer of Akimoto has a preference melting point between 70°C or more and less than 150°C. More particularly, 75°C to 140°C. Akimoto further noted that when it is less than 70°C, the antiaggregation property is degraded. This is contrary to the  $T_g$  value of the present invention.

Blair relates to a process for preparation of toner particles for electrostatic liquid developers utilizing a single vessel wherein a thermoplastic resin and hydrocarbon liquid having a kauributanol value of less than 120 at a total of solids of at least 22% by weight are dispersed in the vessel by moving particulate media (crating shear) at elevated temperatures to plasticize and liquify the resin, while the particulate media are maintained in continuous motion the dispersion is cooled whereby the resin precipitates in the form of toner particles having an average by area particle size of 10 $\mu$ m or less and the particulate media are removed. Liquid

electrostatic developers are prepared by the addition of a charge director compound. The liquid developers are useful for preparation of copies and proofs of various colors.

Blair uses a nonpolar liquid and its toner particles are adapted for electrophoretic movement. In addition, Blair uses a thermoplastic resin whereas the toner in accordance with the present invention utilizes polyolefin resin having a cyclic structure and uses an electrolytic liquid.

Accordingly, Blair does not teach or suggest the present invention and there is no teaching or motivation for one to modify Blair in order to achieve the present invention.

The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggests the desirability of the modification. In re Fritch, 23 U.S.P.Q. 2d 1780, 1783-1784 (Fed. Cir. 1992). There must be some prior art teaching which would have provided the necessary incentive or motivation for modifying the primary reference in the manner suggested by the Examiner. In re Laskowski, 12 U.S.P.Q. 2d 1397, 1399 (Fed. Cir. 1989).

Felder relates to a liquid electrostatic developer having a nonpolar liquid having a kauributonol value of less than 30, thermoplastic resin particles comprised of a mixture of polyethylene homopolymer or a copolymer of polyethylene and acrylic acid, methacrylic acid or the alkyl esters thereof, wherein the acrylic acid comprises 0.1 - 20 weight percent of the polymer and a random copolymer of a monomer selected from the group consisting of vinyltoluene and styrene and a monomer selected from the group consisting of butadiene and acrylate, wherein the thermoplastic resin particles are dispersed in the non-polar liquid form and an ionic or zwitterionic charge director compound which is soluble in the non-polar liquid.

Contrary to the present invention, Felder relates to the use of thermoplastic resin particles with non-polar liquid whereas the present invention teaches a toner using a binder resin comprising at least a polyolefin resin having a cyclic structure with a polar liquid.

Fujiwara relates to a liquid developer for electrophotography having carrier liquid, another particles, dispensed in the carrier liquid, formed of binder resin and colorant, wherein the carrier liquid contains acidic dispersion resin and basic dispersion resin which are soluble in the carrier liquid. Further, Felder relates to a liquid developer for electrophotography having carrier liquid, toner particles, dispensed in the carried liquid, formed of binder resin and colorant, wherein the liquid developer contains a basic dispersion resin that is soluble in the carrier liquid and has a moisture content of 500 ~ 20,000 PPM, and has an acid group on the surface of the toner particle.

Fujiwara does not teach or suggest the use of a polyolefin resin. More particularly, Fujiwara lacks the teaching or the motivation to use a high molecular weight polyolefin resin having a glass transition temperature  $T_g$  of lower than 70°C. In fact, there was no specification as to any preferred temperature range.

Although the Office Action admits that Fujiwara does not disclose that the toner particles further having a wax and a charge control agent as claimed in claim 13, however, the Office Action asserts that Fujiwara discloses that the toner particles can comprise various types of additive agents necessary in resin microparticles. However, Fujiwara in fact never teach or suggest the use of a polyolefin resin having a cyclic structure as a binder resin and certainly Fujiwara did not and need not define an optimal glass transition temperature of less than 70°C.

ACS does not teach or suggest the characteristics of the present invention as disclosed and claimed.

Santilli relates to a liquid electrographic developer having a volatile, electrically insulating carrier liquid, polyester toner particles and wax dispensed in the carrier. The wax-to-polyester weight ratio in the developer is sufficiently high, preferably above 0.25, thereby rendering the developer self-fixing at room temperature. Santilli also relates to a process for developing an electrostatic latent image on a smooth support using a self-fixing liquid developer. Upon application of Santilli's developer to a latent image and evaporation of the liquid carrier from the image, the toner, aided by the wax to the surface without the need for externally applied heat.

Contrary to the present invention, Santilli lacks the teaching of using a polyolefin resin having a cyclic structure and a preferred glass transition temperature  $T_g$  of less than 70°C.

The Examiner is respectfully reminded that for a prior art reference to anticipate in terms of 35 U.S.C. § 102, every element of the claimed invention must be identically shown in a single reference." Scripps Clinic & Research Foundation v. Genentech, Inc. 18 U.S.P.Q. 2d 1001 (Fed. Cir. 1991). Since WO '529 does not disclose or suggest every element (for example, the glass transition temperature  $T_g$  of less than 70°C as claimed in claim 16) of the presently claimed invention, ergo, WO '529 does not teach or suggest the combination of the composition claimed and disclosed in the toner in accordance with the present invention and the 35 U.S.C. § 102 rejection based on WO '529 cannot stand since WO '529 fails to suggest the claimed invention.

Reconsideration and withdrawal of the Section 102(b) rejections in the Office Action based on WO '529 is respectfully requested.

In addition, Applicants further assert the following:

For the Section 103 rejection to be proper, both the suggestion and the expectation of success must be founded in the prior art, and not Applicants' disclosure. In re Dow, 5 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1988).

Even if the cited documents at most, suggested that it could be "obvious to try" incorporating a hydrophilic polymer, specifically PVP, into the polymer alloy in order to improve the hydrophilicity of membranes comprised of polyether ketones and polysulfones (and such is not admitted herein), it is respectfully urged that the Examiner cannot properly establish that these documents show that there would be a reasonable expectation of success for properly a novel polymer alloy composition characterized by improved mechanical and chemical properties compared with pure polymers as defined in the application and claims (see discussion *infra*). However, whether a particular product or method might be "obvious to try" is not a legitimate test of patentability. In re Fine, 5 U.S.P.Q.2d 1596, 1599 (Fed.Cir. 1988); Hybritech Inc. v. Monoclonal Antibodies, Inc., 231 U.S.P.Q. 81, 91 (Fed.Cir. 1986); Ex parte Old, 229 U.S.P.Q. 196, 200 (PTO Bd. App. & Int. 1985). "Obvious to try" is not the standard.

The Office Action states that "it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight." (Office Action, at 27). Applicants respectfully disagree and assert that selective hindsight and hindsight based on Applicants' own disclosure is not proper. The Examiner is respectfully invited to find objective indicia (such as a section in the M.P.E.P. or a court decision) to support the assertions made in the Office Action.

Further, hindsight, based on Applicants' own success as disclosed in the present application, is not a justifiable basis on which to contend that the ultimate achievement of the present invention would have been obvious at the time the invention was made. In re Fine, 5 U.S.P.Q.2d 1596, 1599, 1600 (Fed.Cir. 1988) ("One cannot use hindsight reconstruction to pick

and choose among isolated disclosures in the prior art to deprecate the claimed invention"). The only clear link among the cited documents is the present application; and hindsight reconstruction is not a proper basis for combining references and rejecting claims.

Moreover, in an obviousness rejection, the standard established in In re Fritch, 23 U.S.P.Q.2d 1780, 1783-84 (Fed. Cir. 1992), must be followed. Fritch in pertinent part states (with emphasis added):

Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination. Under Section 103, teachings of references can be combined only if there is some suggestion or incentive to do so ...  
**The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification.**

Even though a reference can be modified in a way that the Examiner suggests, this does not mean that the reference renders the instant invention obvious unless the motivation to do the modification is in the references teaching. It is respectfully submitted that no such teaching exists in the references cited by Examiner either alone or in any combination. There is nothing in the reference teachings suggesting the modification or the desirability of the modification. There is no evidence in the Office Action showing why the skilled artisan would have combined the cited references and then would have arrived at the present invention.

There must be some teaching, suggestion, or incentive in the references (and not Applicants' disclosure) that supports the combination of the references. In re Fine, 5 U.S.P.Q. 2d 1596, 1599, 1600 (Fed. Cir. 1988). No such teaching, suggestion or incentive is in the cited documents.

According to the Board of Patent Appeals and Interferences in the case of Ex parte

Obukowicz, 27 U.S.P.Q.2d 1063, 1065 (B.P.A.1. 1992) (with emphasis):

In proceedings before the Patent and Trademark Office, the Examiner bear the burden of establishing a prima facie case of obviousness based upon the prior art. In re Piasecki, 745 F.2d 1468, 1471-72, 223 U.S.P.Q. 785, 787-88 (Fed. Cir. 1984). **The Examiner can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art *would lead that individual to combine the relevant teachings of the references.*** In re Fine, 837 F.2d 1071, 1074, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988). **Indeed, the teachings of references can be combined only if there is some suggestion or incentive to do so.** ACS Hospital Systems, Inc. v. Montefiore Hospital, 723 F.2d 1572, 1577, 221 U.S.P.Q. 929, 933 (Fed. Cir. 1984).

The picking and choosing from all the cited references to allege that the instant invention is anticipated or obvious simply fails in light of the case law under Section 103. The Examiner is invited to cite references for the desirability of modification and the teaching, suggestion or incentive for combination and for modification of the reference teachings or provide an affidavit, as called for by 37 C.F.R. § 1.106(b) and M.P.E.P. § 706.02(a). Otherwise, it is respectfully submitted that the Section 103 rejection must be withdrawn.

Accordingly, none of the cited references, alone, or in any combination, render Applicants' invention *prima facie* obvious. Moreover, none of the references teaches or suggests the surprising properties of the presently claimed invention, as shown in the application, which properties, Applicants submit are additionally demonstrative of the patentability of the instant invention.

Reconsideration and withdrawal of the Sections 102(a) and 103(a) are respectfully requested.

In view of the foregoing amendments, remarks and attachments, reconsideration and withdrawal of the objections to and rejections of claims 1 to 15 are respectfully requested.

If any issue remains as an impediment to allowance, an interview is respectfully requested and the Examiner is further respectfully requested to contact the undersigned by telephone to arrange a mutually convenient time and manner for the interview.

Pursuant to 37 C.F.R. §§1.136(a) and 1.17(a)(2), Applicants hereby request that the term for reply to the February 21, 2001 Office Action be extended three months, i.e., up to and including August 21, 2001. A check for \$870.00 is enclosed herewith.

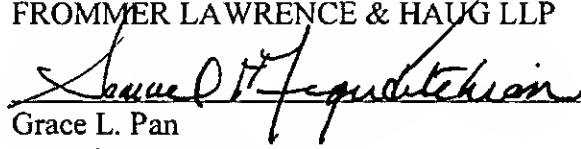
Any additional fee occasioned by this paper, including with respect to the claim amendment herewith and the petition for extension of time, or any overpayment in those fees, may be charged or credited to Deposit Account No. 50-0320.

In view of the amendments and remarks herewith, the present application is in condition for allowance. Early and favorable reconsideration and prompt issuance of a Notice of Allowance are earnestly solicited.

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

Please amend page 1, line 1 to read as follows:

The toner of the present invention may be a liquid dried system containing 30% by weight to 50% by weight of a dried polymerized system containing 0.5% by weight to 5% by weight of a charge control agent, 1% by weight to 10% by weight of wax, 0.1% by weight to 2% by weight of aerosol silica, 1% by weight to 10% by weight of pigment and 85% by weight to 95% by weight of a binder resin; and 50% by weight to 70% by weight of an electrolytic solution.

The toner of the present invention may also be a liquid toner containing 30% by weight to 50% by weight of a mixture containing 0.5% by weight to 1.5% by weight of carbon black, 0.5% by weight to 1.5% by weight of a charge control agent and 85% by weight to 95% by weight of a binder resin; and 50% by weight to 70% by weight of an electrolytic solution.

Please amend page 8, lines 22 to page 9, line 3 to read as follows:

The high-viscosity/low viscosity polyolefin resin having a cyclic structure, moreover, is colorless, transparent, and highly light-transmissive. For instance, the azo pigment [Permanent Rubin] PERMANENT RUBIN<sup>®</sup> F6B (Hoechst AG) was added to the resin, and the mixture was thoroughly kneaded, and then formed into a sheet by means of a press. This sheet was confirmed to be highly transparent. Thus, the resin is sufficiently usable for a color toner. Measurement by the DSC method has shown this polyolefin resin to require a very low heat of fusion. Hence, this resin can be expected to markedly reduce energy consumption for fixing.

Please amend page 16, lines 8-18 to read as follows:

One % by weight of a charge control agent [(Copy Charge NX, Hoechst AG)] (COPY CHARGE NX<sup>®</sup>, Hoechst AG), 4% by weight of amide wax (BNT, Nippon Seika), 0.5% by weight of aerosol silica (HDK-H2000, Wacker Chemie), 5% by weight of magenta pigment (PERMANENT RUBIN<sup>®</sup> F6B, Hoechst AG) as a colorant, and 89.5% by weight of a binder resin were mixed, and melt kneaded at 130°C by a twin roll. Then, the mixture was cooled to solidification, and coarsely crushed, followed by finely dividing the particles using a jet mill. The resulting fine particles were classified to select particles with an average particle diameter of about 10  $\mu\text{m}$ , thereby preparing a toner.

Please amend page 17, lines 6-15 as follows:

One % by weight of a charge control agent [(Copy Charge NX, Hoechst AG)] (COPY CHARGE NX<sup>®</sup>, Hoechst AG), 4% by weight of wax (BNT, Nippon Seika), 0.5% by weight of aerosol silica (HDK-H2000, Wacker Chemie), and 5% by weight of magenta pigment (PERMANENT RUBIN<sup>®</sup> F6B, Hoechst AG) as a colorant were mechanically dispersed and mixed in monomer components corresponding to 89.5% by weight of a binder resin at the time of polymerization of the binder resin. The mixture was interfacially polymerized into particles with an average particle diameter of about 10  $\mu\text{m}$ , thereby preparing a toner.